Remarks

Claims 1, 2, 4-10, 21, 23-27 and 31-32 are pending. Claim 3 has been cancelled. Claims 1, 21, 23, and 31 have been amended.

I. Rejections under 35 U.S.C. § 102

Claims 1, 2, 4-10, 21, 23-27, and 31-32 stand rejected under § 102(e) as being anticipated by U.S. Patent No. 6,279,007 to Uppala ("Uppala"). As provided in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim...." Therefore, the Uppala patent must disclose all of the elements of the claims to sustain the rejections. Accordingly, Applicant respectfully traverses these rejections.

Claims 1, 2, and 4-10

MPEP § 2131 requires that "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Claim 1, as amended, recites in part forming a first database table having a plurality of entries, each entry representing an object with an associated data to be accessed; and designating a parent-child relationship between a first object and a second object in each entry, wherein the relationship is reversible, so that the first object can be denoted as a parent to the second object in a first entry, and the second object can be denoted as a parent to the first object in a second entry.

Uppala fails to teach or suggest designating a parent-child relationship between a first object and a second object in each entry, wherein the relationship is reversible, so that the first object can be denoted as a parent to the second object in a first entry, and the second object can be denoted as a parent to the first object in a second entry. In fact, Uppala actually teaches away from Applicant's disclosure by clearly illustrating and maintaining an established hierarchical relationship between various nodes (see, e.g., Figs. 6 and 7A-7C). Accordingly, as Uppala fails to teach or suggest the above recited element of claim 1 as required by MPEP § 2131, claim 1 is allowable over the Uppala patent.

Claims 2 and 4-10 depend from and further limit claim 1 and are allowable over Uppala for at least this reason.

Claim 21

As stated previously, MPEP § 2131 requires that "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Claim 21, as amended, recites in part designating a reversible parent-child relationship between pairs of members, wherein a first member can be denoted as a parent to a second member, and the second member can be denoted as a parent to the first member.

Uppala fails to teach or suggest designating a reversible parent-child relationship between pairs of members, wherein a first member can be denoted as a parent to a second member, and the second member can be denoted as a parent to the first member. In fact, Uppala actually teaches away from Applicant's disclosure by clearly illustrating and maintaining an established hierarchical relationship between various nodes (see, e.g., Figs. 6 and 7A-7C). Accordingly, as Uppala fails to teach or suggest the above recited element of claim 21 as required by MPEP § 2131, claim 21 is allowable over the Uppala patent.

Claims 23-27

As stated previously, MPEP § 2131 requires that "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Claim 23, as amended, recites in part creating a first table having multiple entries, each entry including at least some of the plurality of objects and associated data to be accessed, wherein the first table associates each of the plurality of objects with an object identifier, and wherein the creating includes populating the first table with the associated data regardless of whether the associated data is unique for multiple entries.

Uppala fails to teach or suggest each of the above recited elements, such as creating a first table having multiple entries, wherein the creating includes populating the first table with the associated data regardless of whether the associated data is unique for multiple entries.

The Office Action relies on the Fig. 7A of the Uppala reference as an example to illustrate that the data associated with the entry is stored in the column labeled as "Node Value" (Office Action, p. 8, para. 4). However, Uppala actually teaches away from Applicant's disclosure by stating that Fig. 7A consists of "*unique instances of node values*". (emphasis added) (col. 6, lines 49-50). More specifically, Uppala discloses:

> The invention uses three data structures, shown as database tables in FIGS. 7A, 7B and 7C, to manage hierarchical values: node table 700, hierarchy value table 710 and hierarchy parent table 720. *The node table 700 consists of unique instances of node*

> *values* collected from all hierarchical values present in the tree 600. *For each unique node value, the invention* uses a first hashing algorithm to generate a node hash value 705 that identifies a row 701 in the node table 700. The invention *assigns a unique node identifier 703 to the node value* and stores the node identifier 703, the node hash value 705, and the node value 707 in the row 701 identified by the node hash value 705. (col. 6, lines 46-58) (emphasis added)

Therefore, Uppala discloses a unique node value for each row of the table in Fig. 7A. In contrast, Applicant's claim 23 recites populating the first table with the associated data regardless of whether the associated data is unique for multiple entries. Accordingly, Uppala fails to teach or suggest the above recited elements of claim 23 as required by MPEP § 2131, and claim 23 is allowable over the Uppala patent.

Claims 24-27 depend from and further limit claim 23 and are allowable over Uppala for at least this reason.

Claims 31 and 32

As stated previously, MPEP § 2131 requires that "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Claim 23, as amended, recites in part organizing a plurality of objects into at least first and second entries, wherein each object is related to at least one other object by a defined relationship; storing an object identifier associated with each of the plurality of objects; and storing associated data to be accessed for each object identifier, wherein the storing is performed regardless of whether the data stored in the first entry is unique with respect to the data stored in the second entry.

Uppala fails to teach or suggest each of the above recited elements, such as storing associated data to be accessed for each object identifier, wherein the storing is performed regardless of whether the data stored in the first entry is unique with respect to the data stored in the second entry. The Office Action relies on the Fig. 7A of the Uppala reference as an example to illustrate that the data associated with the entry is stored in the column labeled as "Node Value" (Office Action, p. 8, para. 4). However, Uppala actually teaches away from Applicant's disclosure by stating that Fig. 7A consists of "*unique instances of node values*". (emphasis added) (col. 6, lines 49-50). More specifically, Uppala discloses:

> The invention uses three data structures, shown as database tables in FIGS. 7A, 7B and 7C, to manage hierarchical values: node table 700, hierarchy value table 710 and hierarchy parent table 720. *The node table 700 consists of unique instances of node values* collected from all hierarchical values present in the tree 600. *For each unique node value, the invention* uses a first hashing algorithm to generate a node hash value 705 that identifies a row 701 in the node table 700. The invention *assigns a unique node identifier 703 to the node value* and stores the node identifier 703, the node hash value

705, and the node value 707 in the row 701 identified by the node hash value 705. (col. 6, lines 46-58) (emphasis added)

Therefore, Uppala discloses a unique node value for each row of the table in Fig. 7A. In contrast, Applicant's claim 31 recites storing associated data to be accessed for each object identifier, wherein the storing is performed regardless of whether the data stored in the first entry is unique with respect to the data stored in the second entry. Accordingly, Uppala fails to teach or suggest the above recited elements of claim 31 as required by MPEP § 2131, and claim 31 is allowable over the Uppala patent.

Claim 32 depends from and further limits claim 31 and is allowable over Uppala for at least this reason.

II. Conclusion

Therefore, it is respectfully submitted that independent claims 1, 21, 23, and 31 are in condition for allowance. Dependent claims 2, 4-10, 24-27, and 32 depend from and further limit their respective independent claims and therefore are allowable as well.

Should the Examiner deem that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

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